(b) if so, Government's reaction in the matter; and

(c) whether Government have taken any decision in the matter?

THE MINISTER OF RAILWAYS (SHRI NITISH KUMAR): (a) No, Sir.

(b) and (c) Do not arise.

US Patent for Indian Scientific Breakthrough

*378. SHRI NANA DESHMUKH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether India has achieved two major scientific breakthroughs, having developed a process to grow organs and a low cost simputer and succeeded in having a US patent for the medical breakthrough; and

(b) if so, what are the details in this regard?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) Yes, Sir.

(b) A statement is laid on the table of the house.

Statement

Details of Major Scientific breakthroughs achieved by India

A doctor while working at the maulana Azad Medical College, New Delhi developed a surgical technique for regenerating organs in mammals. It has been informed by the inventor that stem cells from body tissues like, peritoneum and gut, were selected and colonised with the tissue and organ systems in the body using specialised surgical technique. It takes about 2 to 3 months for the formation of an organ. This is a path breaking achievement as this technique has the potential of revolutionalising the medical science as one can see the possibility of doing away with organ and tissue transplants. No donors are required. As the body forms tissues and organs from its own cells, there is no problem of acceptance of foreign body, a problem associated with transplants. No post-operative treatment by immundsupressant drugs are required as needed in transplant surgery. The application was filed in the US Patent and Trademark Office on August 29, 1997 and the patent was granted on May 8, 2001.

The Simputer is a low cost portable alternative device to PC by which the benefits of IT can reach the common man. This has been designed and developed by the scientists of the Indian Institute of Science, Bangalore. It is a hand held computing device. The design goal is to make it usable by people who may not be literate. The Simputer offers conversion of text to speech. It can currently read and speak several Indian languages. Thus, use of simple icons to be selected and text to speech output in local language are the primary

means of communication. The user is not expected to be familiar with the currently widespread user interface paradigm like windows, slidebars and pull down menus. The projected cost of the Simputer is Rs. 9000/- at large volumes. It can take Smart Cards and this enables it to be shared by a community. A local community such as the village panchayat, the village school, a kiosk, a village postman or even a shopkeeper should be able to loan the device to individuals for some length of time and then pass it on to others in the community. This would reduce the cost per user. Applications in diverse sectors such as micro banking, large data collection, agricultural information and as school laboratory are possible at an affordable price.

Plantation programmes

*379. PROF. M.M. AGARWAL: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) the details of plantation programmes being implemented in different parts of the country during the Ninth Five Year Plan, State-wise;

(b) the progress and achievements made so far;

(c) whether Government have taken any steps to achieve the targets for those programmes effectively in different States; and

(d) if so, the details thereon?

THE MINISTER OF ENVIRONMENT AND FORESTS (SHRI T. R. BAALU): (a) The major Centrally Sponsored Schemes of Ministry of Environment & Forests in which plantation activities are undertaken are as under:—

(i) Integrated Afforestation and Eco-Development Project Scheme (IAEPS)

(ii) Area Orientetd Fuelwood and Fodder Project Scheme (AOFFP)

(iii) Conservation and Development of Non-Timber Forest Produce (including medicinal plants) Scheme (NTFP)

(iv) Association of Schedule Tribe and Rural Poor in Regeneration of Degraded Forests on Usufruct Sharing Basis Scheme (ASTRP)

(b) to (d) The State-wise details of financial progress and the physical progress achieved under the programmes are furnished at Statement-I and Statement-II respectively *(See* below). However, in respect of ASTRP, an area of 10639 ha. has been covered against the target of 16747 ha. upto 2000-01. The performance of the schemes is reviewed periodically through quarterly and annual progress reports. Subsequent release of funds is subject to satisfactory utilisation of the central assistance provided earlier.